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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/636,142 | 08/06/2003 | Yoshihiro Ue | 01232D/LH | 2383 |
| 1933 | 7590 | 08/03/2004 | EXAMINER | |
| FRISHAUF, HOLTZ, GOODMAN & CHICK, PC | | | FINEMAN, LEE A | |
| 767 THIRD AVENUE | | | ART UNIT | |
| 25TH FLOOR | | | PAPER NUMBER | |
| NEW YORK, NY 10017-2023 | | | 2872 | |

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/636,142

Applicant(s)

UE, YOSHIHIRO

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☒ Certified copies of the priority documents have been received in Application No. 09/836379.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to an amendment filed 24 May 2004 in which claims 3, 5 and 6 were amended and claims 1-2 were cancelled. Claims 3-6 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada, U.S. Patent Application Publication No. US 2001/0024320 A1 in view of Tomiyama et al., U.S. Patent No. 5,521,762.

Regarding claim 3, Okada discloses a focus stabilizing apparatus (fig. 1) comprising an objective lens (8) arranged opposite to an observation sample (M); a fixing base (7 with 11, when vibration unit as shown in fig. 3 is between 7 and 8; see page 3, section [0052], lines 11-15) for fixing the objective lens; a sample base (2) for supporting the observation sample (M); a focus adjusting mechanism (unnumbered; fig. 1) which continuously extends between the sample base and the fixing base (in so far as the frame (1) and the arm (3) are part of the focus adjusting mechanism), for varying a distance along an optical axis between the sample base and the fixing base; a minute movement table (12) on which the objective lens is provided and provided between the fixing base and the sample base; springs (14) situated between the fixing base and the minute movement table (fig. 3) to allow the minute movement table to be moved in an optical

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axis direction of the objective lens; an actuator (13) provided between the fixing base and the minute movement table to minutely displace the minute movement table in the optical axis direction of the objective lens (fig. 4)); a displacement sensor (15) for detecting a displacement amount (page 3, section [0049]) of the objective lens; and control means (16) for allowing the actuator to perform an extending/contracting operation based on a detection output of the displacement sensor to control the objective lens and bring it to a just-in-focus position relative to the observation sample. Okada discloses the claimed invention except for the springs being parallel springs. Tomiyama et al. teaches an objective lens holder (figs. 3 or 4) with parallel springs (60, 62, 70, 72) that allow a minute movement table (50) to be moved in an optical axis direction of the objective lens (not shown, at 100). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the springs of Okada with that of Tomiyama et al. because the springs can be efficiently manufactured from one piece to save manufacturing time as well as reduce costs (column 6, lines 31-40, Tomiyama)

Regarding claim 4, Okada further discloses wherein the objective lens is focused on the observation sample by the focus adjusting mechanism (page 2, section [0037-0038]), and then, the control means keeps the objective focused on the observation sample (page 3, section [0044]).

Regarding claim 5, Okada further discloses where in the sample base is a stage (2); the focus adjusting mechanism includes a focus-adjusting handle (unnumbered, fig. 1); and the displacement sensor (15) is provided in a vicinity of an end of the objective lens (when vibration unit as shown in fig. 3 is between 7 and 8 page 3, section [0052], lines 11-15) for detecting a distance between the stage and the end of the objective lens (page 3, sections [0048-0049])

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Regarding claim 6, Okada further discloses a control loop for adjusting distance (page 3, section [0049]) with a memory section for storing an output of the displacement sensor corresponding to a just-in-focus state between the observation sample and a objective lens (in so far as a no vibration state (or zero state) is stored in the controller 16 when the object is in focus); a comparing section (16) for comparing an output of the displacement sensor ($p>0$) and an output of the displacement sensor stored in the memory section ($p=0$); and a control section (16) for outputting an electrical signal (s) for canceling a distance variation between the observation sample and the objective lens based on a result of comparison by the comparing section (page 3, section [0049]).

Response to Arguments

3. Applicant's arguments filed 24 May 2004 have been fully considered but they are not persuasive.

Applicant argues that Okada does not disclose, teach or suggest wherein the focus adjusting mechanism continuously extends between the sample base and the fixing base for varying a distance along an optical axis between the sample base and the fixing base. The examiner respectfully disagrees. Okada discloses in section [0037] that the apparatus includes a focus adjusting mechanism to varying a distance along an optical axis between the sample base (2) and the objective lens (8) which is attached to the fixing base (7) and is further evidenced by the focusing handle shown in the frame (1). It is the examiner's position that the focusing mechanism includes the frame (1) and the arm (3) to make the distance vary and therefore continuously extends between the sample base (2) and the fixing base (7).

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The applicant further argues that the displacement sensor of Okada (15) is not in the vicinity of an end of the objective lens because the figure shows it in the vibration absorber unit (10) between the arm (3) and the ocular tube (4). The examiner respectfully disagrees. Okada states on page 3, section [0052], lines 11-15 that the unit (10) can be arranged "between the revolving nosepiece 7 and the objective 8 so as to reduce the vibration of the revolving nosepiece 7 or the objective 8." Therefore the sensor is in the vicinity of an end of the objective lens.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF

July 27, 2004



MARK A. ROBINSON
PRIMARY EXAMINER